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| APPLICATION NO.              | FILING DATE   | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|------------------------------|---------------|----------------------|---------------------|------------------|
| 09/889,768                   | 10/18/2001    | Noriyuki Saito       | MAT-8156US          | 1134             |
| 759                          | 90 12/30/2003 |                      | EXAMINER            |                  |
| Lawrence E Ashry             |               |                      | GHATT, DAVE A       |                  |
| Ratner & Prestia             | •             |                      | ART UNIT            | PAPER NUMBER     |
| One Westlakes,<br>PO Box 980 | Berwyn        | •                    | 2854                |                  |
| Valley Forge, P              | A 19482       |                      |                     |                  |

Please find below and/or attached an Office communication concerning this application or proceeding.

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Application No.                                                                                                                                                                            | Applicant(s)                                                                                                         |                        |  |  |  |  |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------|------------------------|--|--|--|--|
| s,<br>4)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 09/889,768                                                                                                                                                                                 | SAITO ET AL.                                                                                                         |                        |  |  |  |  |
| Office Action Summary                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Examiner                                                                                                                                                                                   | Art Unit                                                                                                             |                        |  |  |  |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Dave A Ghatt                                                                                                                                                                               | 2854                                                                                                                 | IMW                    |  |  |  |  |
| The MAILING DATE of this communication                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | appears on the cover sheet wit                                                                                                                                                             | h the correspondence a                                                                                               | ddress                 |  |  |  |  |
| Period for Reply                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                            |                                                                                                                      |                        |  |  |  |  |
| A SHORTENED STATUTORY PERIOD FOR RETURN THE MAILING DATE OF THIS COMMUNICATION - Extensions of time may be available under the provisions of 37 CF after SIX (6) MONTHS from the mailing date of this communication - If the period for reply specified above is less than thirty (30) days, - If NO period for reply is specified above, the maximum statutory period for reply within the set or extended period for reply will, by second provided by the Office later than three months after the reamed patent term adjustment. See 37 CFR 1.704(b).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | DN. R 1.136(a). In no event, however, may a re n. a reply within the statutory minimum of thirty eriod will apply and will expire SIX (6) MONT tatute, cause the application to become AB/ | ply be timely filed  (30) days will be considered tim  'HS from the mailing date of this  ANDONED (35 U.S.C. § 133). | ely.<br>communication. |  |  |  |  |
| Status  1) Responsive to communication(s) filed on 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 17 October 2003                                                                                                                                                                            |                                                                                                                      |                        |  |  |  |  |
| 1) Responsive to communication(s) filed on 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | This action is non-final.                                                                                                                                                                  |                                                                                                                      |                        |  |  |  |  |
| ,                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                            |                                                                                                                      |                        |  |  |  |  |
| 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                            |                                                                                                                      |                        |  |  |  |  |
| Disposition of Claims                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                            |                                                                                                                      |                        |  |  |  |  |
| 4)⊠ Claim(s) <u>1-21</u> is/are pending in the applica                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | tion.                                                                                                                                                                                      |                                                                                                                      |                        |  |  |  |  |
| 4a) Of the above claim(s) is/are with                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 4a) Of the above claim(s) is/are withdrawn from consideration.                                                                                                                             |                                                                                                                      |                        |  |  |  |  |
| 5)⊠ Claim(s) <u>21</u> is/are allowed.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | )⊠ Claim(s) <u>21</u> is/are allowed.                                                                                                                                                      |                                                                                                                      |                        |  |  |  |  |
| 6)⊠ Claim(s) <u>1-13 and 15-20</u> is/are rejected.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                            |                                                                                                                      |                        |  |  |  |  |
| 7)⊠ Claim(s) <u>14</u> is/are objected to.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 7) Claim(s) <u>14</u> is/are objected to.                                                                                                                                                  |                                                                                                                      |                        |  |  |  |  |
| 8) Claim(s) are subject to restriction a                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | nd/or election requirement.                                                                                                                                                                |                                                                                                                      |                        |  |  |  |  |
| Application Papers                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                            |                                                                                                                      |                        |  |  |  |  |
| 9) The specification is objected to by the Examiner.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                            |                                                                                                                      |                        |  |  |  |  |
| 10) $\boxtimes$ The drawing(s) filed on <u>18 October 2001</u> is/are: a) $\boxtimes$ accepted or b) $\square$ objected to by the Examiner.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                            |                                                                                                                      |                        |  |  |  |  |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                            |                                                                                                                      |                        |  |  |  |  |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                            |                                                                                                                      |                        |  |  |  |  |
| 11)☐ The oath or declaration is objected to by th                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | e Examiner. Note the attached                                                                                                                                                              | Office Action or form P                                                                                              | PTO-152.               |  |  |  |  |
| Priority under 35 U.S.C. §§ 119 and 120                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                            |                                                                                                                      |                        |  |  |  |  |
| 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) All b) Some * c) None of:  1. Certified copies of the priority documents have been received.  2. Certified copies of the priority documents have been received in Application No  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.  13) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet.  37 CFR 1.78.  a) The translation of the foreign language provisional application has been received.  14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78. |                                                                                                                                                                                            |                                                                                                                      |                        |  |  |  |  |
| Attachment(s)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | _                                                                                                                                                                                          |                                                                                                                      |                        |  |  |  |  |
| Notice of References Cited (PTO-892)     Notice of Draftsperson's Patent Drawing Review (PTO-948)     Information Disclosure Statement(s) (PTO-1449) Paper No.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 5) Notice of In                                                                                                                                                                            | ummary (PTO-413) Paper No<br>formal Patent Application (PT                                                           |                        |  |  |  |  |
| Patent and Trademark Office                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                            |                                                                                                                      |                        |  |  |  |  |

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#### **DETAILED ACTION**

## Claim Rejections - 35 USC § 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claims 1-4, 6-12, and 15-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hosomi et al. (US 5,833,380) in view of Komori et al. (US 6,102,596). With respect to claims 1, 2, 6, and 16 as illustrated in Figure 5, Hosomi et al. teaches a printer with a main body and a storage space for storing printing sheet S. Hosomi et al. teaches the storage space disposed in the main body and having a top opening with a cover 8 installed at the top opening of the storage space, the cover can be freely opened and closed. Figure 5 also shows a sheet outlet port 15 formed between an opening end of the cover 8, and a storage space wall opposing thereto. (See also Column 5 lines 39-47). Figures 4 and 5 show a printing section (P, H) disposed below the sheet outlet port. Hosomi et al. further teaches a sheet cutting means (14, 9) disposed above the printing section wherein the sheet cutting means comprises a stationary linear cutting blade 14 disposed on the opening end of the cover, and a second cutting blade 9 disposed on the main body portion opposing the first cutting blade 14, the first and second cutting blades cutting the printing sheet. In fact, Hosomi et al. teaches all the claimed features except the second cutting blade is not a circular cutting blade as recited. Komori et al. teaches a printing device similar to Hosomi et al., with a paper storage space illustrated in Figures 3B and 3C, the printer further



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including a stationary linear cutting blade 201 and a movable circular cutting blade 202. To one of ordinary skill in the art it would have been obvious to use linear/circular cutting arrangement as taught by Komori et al., in the apparatus of Hosomi et al. to enable sharp cutting of the paper with the rotary blade, as taught by Komori et al. in column 8 lines 55-60.

With respect to claims 3, 4, 10, 11, 12, and 19, as outlined Hosomi et al. teaches all the claimed apparatus except for a circular second blade that moves along the stationary blade. In column 5 lines 44-53, Komori et al. teaches a circular movable blade 202 that moves along the stationary blade 201. Figures 11 and 13 show the movable blade 202 moving away from the stationary blade 201 to a standby position where it does not cut the paper. The movable blade 202 is placed at a place separated from an end and side surface of the stationary blade 201, when the movable blade is in a standby position. To one of ordinary skill in the art it would have been obvious to use linear/circular cutting arrangement as taught by Komori et al., in the apparatus of Hosomi et al. to enable sharp cutting of the paper with the rotary blade, as taught by Komori et al. in column 8 lines 55-60.

With respect to claims 7, 16, and 17 as illustrated in Figure 8 of the primary reference Hosomi et al. teaches the second sheet cutting mechanism 9 installed opposing the linear sheet cutting mechanism 14. Figure 4 illustrates the sheets stored in the storage space that flows into the printing section through a space between the main body and the cover. As outlined above, Hosomi et al. teaches all the claimed subject matter except the second cutting blade is not a circular cutting blade as recited. Komori et al. teaches a printing device including a stationary linear cutting blade 201 and a movable circular cutting blade 202. To one of ordinary skill in the art it would have been obvious to use linear/circular cutting arrangement as taught by Komori et

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al., in the apparatus of Hosomi et al. to enable sharp cutting of the paper with the rotary blade, as taught by Komori et al. in column 8 lines 55-60.

With respect to claim 8, as illustrated in Figure 5 of the primary reference Hosomi et al., the linear cutting mechanism 14 is disposed at an opening end of the cover 9.

With respect to claims 9 and 18, as illustrated in Figures 1-3 of the primary reference Hosomi et al., the linear blade 14 has a length longer than the width of the printing paper.

With respect to claims 11, 12, and 19, as illustrated in Figure 8, the movable blade 9 is placed at a place separated from an end and side surface of the stationary blade 14, when the movable blade is in a standby position.

3. Claims 5, 13, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hosomi et al. (US 5,833,380) in view of Komori et al. (US 6,102,596) as applied to claim1-13 and 15-20 above, and further in view of Onishi et al. (US 5,904,805). As outlined in the above rejection Hosomi et al. in view of Komori et al. teach all the claimed structure, except for the circular blade cutter including a spring to actuate the movable blade toward the stationary linear blade. As illustrated in Figures 1a, 1b, 1c, and 2, Onishi et al. teaches a printing apparatus similar to the apparatus taught by Hosomi et al. and Komori et al. Onishi et al. Teaches a cutting arrangement for cutting sheets, the cutting arrangement having a circular cutting blade 10' and a fixed linear blade 5. Figure 2 illustrates the circular cutting blade having a spring 14. To one of ordinary skill in the art, it would have been obvious to use a spring arrangement with the circular blade as taught by Onishi et al., in the apparatus of Hosomi et al. in view of Onishi et al., in order

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to press the circular cutting blade against the fixed linear blade, as taught by Onishi et al. in column 7 lines 23-27.

## Allowable Subject Matter

- 4. Claim 21 is allowed.
- 5. Claim 14 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim 14 is indicated as including allowable subject matter because the prior art of record does not teach or render obvious the total combination claimed, including a printer wherein the main body further includes a slope, the slope disposed at a place opposing the standby position, and the movable blade is pushed to the slope by the spring mechanism, moves along the slope, and contacts the side surface of the stationary blade.

## Examiner's Remarks

6. The Examiner has considered the amendment filed October 17, 2003. In view of the amendment to claim 1, the rejection under 35 U.S.C. 112 first paragraph has been withdrawn. In view of other amendments adding the requirement for a "circular cutting blade", the examiner has now applied the references to Komori et al. and Onishi et al.



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#### Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dave A Ghatt whose telephone number is (703) 308-2417. The examiner can normally be reached on Mondays through Friday 8:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew H Hirshfeld can be reached on (703) 305-6619. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 306-3431.

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